time the female was at the incomplete nest, preening, the first egg not yet laid. The pair were not to be left alone, for at 8.40 a.m. the second male (or a different one?) appear ed behind the hen who gave him what appeared to be a mild peck. Then he followed her,

now walking so close as to give one the impression that he was the rightful mate. At this her mate hurried along the path that the hen and second male had been taking as if for a escape, walking past the female.

fight. However the second male made his

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13. SOME STORM-BLOWN PELAGIC BIRDS IN POINT CALIMERE

The occurrence of pelagic birds on the Indian coastline has almost invariably been associated with cyclonic storms accompanied by strong winds. A cyclonic depression in the Bay of Bengal from the 22nd to 25th December 1983, the cause of heavy and continuous rain throughout Thanjavur district resulted in three very interesting such sightings at Point Calimere (10° 18'N; 79° 51'E) in Thanjavur district, Tamil Nadu on the 23rd morning. Two of these, the Lesser Frigate Bird (Fregata minor) and the Lesser or Whitecapped Noddy (Anous tenuirostris) are perhaps the first records for the east coast.

Lesser Frigate Bird (Fregata minor):

At 0845 hrs on the morning of 23rd December while we were standing near the mouth of a creek on the southern shoreline of Point Calimere Sanctuary, a completely dark Frigate Bird, followed after a few minutes by another in the same plumage flew over at c. 100 feet; at 1030 hrs, one of them again came directly over us, and soared, circling on motionless wings for five minutes; the characteristic 'frigate bird' silhouette, as also the long, hooked bill left no doubt about their generic identity. The uniformly dark plumage (contra varying amounts of white on underparts) later diagnosed their identity as males of this species.

In a separate observation on the same day at 1200 hrs one of us (SAR) recorded seeing a 'frigate bird with some white on underparts', on an inland freshwater body surrounded by forest, c. 3 km from the above sightings. This could have been a female of the same species.

While we were talking to fishermen the following day, they described seeing a bird in the afternoon of the 23rd, which must almost certainly have been one of the frigates; it had settled on the beach, and again on top of the lighthouse (c. 40 feet).

There are only three previous confirmed sightings of this bird within Indian limits (Taylor 1953), all 3 in Bombay during the SW monsoon — June 29th and July 5th 1953. The only Indian specimen is a storm-blown example entangled in a fishing net off Quilon on the Kerala coast, also during the SW monsoon. The present record is thus the first for this species for the Indian East Coast.

Sooty tern (Sterna fuscata):

A single adult tern with contrasting dark upperparts, pure white underparts, and deeply forked tail was first seen at 0830 hrs on the 23rd morning, flying along the shoreline (SBC, PBS, VNR). It then drifted inland towards the thorn-scrub where it was again sighted by one of us (SQA), flying at about 50 feet; it was then traversing a wavy flightpath, weaving its way in such a manner as to stay over the open ground and not fly over the *Prosopis juliflora* bushes. The contrasting dark grey and pure white plumage along with a relatively long neck, swept-back tapering wings with a white dorsal leading edge, and elongated outer-tail feathers in the deeply forked tail were noted as diagnostic field characters, confirmed from INDIAN HANDBOOK as characteristic of the species.

The Sooty Tern has previously been recorded once from Point Calimere, substantiated by a specimen (Ambedkar 1983).

Lesser or Whitecapped Noddy (Anous tenui-rostris):

Three birds seen initially identified as the Brown Noddy (*Anous stolidus*), but later confirmed from photographs taken at the time as this species by Dr. Tony Diamond. First seen by us at 0815 hrs on 23rd December and subsequently by several observers including Dr. R. Sugathan, Senior Field Biologist, Avifauna Project, BNHS and Ms. Elizabeth Forster, a British birdwatcher.

The three birds included a sub-adult with the silvery crown much less pronounced, and feathers of the nape and hind neck edged pale buff. One aspect of the plumage in the two adults that we have not been able to find in the literature was the presence of prominent blue-grey patches suffused with the dark brown on the hind neck, very conspicuous at close quarters. Ali & Ripley (HANDBOOK Vol. 3 p. 73) have mentioned the 'white forehead passing into ashy grey and then into dark

brown on nape'. The two adults on record had prominent blue patches which stood out from the surrounding brown plumage, and were almost identical in both birds. These were observed at a distance of a few inches between 0915 and 0930 hrs while they rested, obviously exhausted on the shore.

When first sighted at 0815 hrs in clear bright weather all three birds were actively feeding over 2 to 3 feet deep water c. 50 m from the mouth of a creek. The birds were foraging very actively even in the warm sun suggesting that due to strong winds they had been unable to feed for a long time. They were foraging by hovering 2 to 3 inches over the slightly rippled water surface while holding their bodies at a 45° or greater angle to the surface, thus appearing as if standing on their tails! On sighting a shrimp or small fish near the surface the whole body would be flicked forward describing a half loop, the bill touching the water first; they would then often land in the water momentarily before taking off again. Feeding in this manner the three birds appeared to have staked out individual 'beats' and worked these upwind (inland) before flying back to the mouth of the sea and starting again. They were exceedingly unwary and when feeding near the bank of the creek did not shift at all to avoid the three observers 10 feet away on the shore. A harsh Krr-ak call was uttered sometimes while hovering or flying downwind. Ali & Ripley (ibid.) do not have any records of calls or other habits for this species from Indian waters. The calls recorded by us were bi-syllabic with a distinct emphasis on the first syllable. At 0900 hrs, after they were observed feeding for c. 45 minutes all three settled within 2 m of each other on the opposite bank from the observers, where there was a small flock of little terns (Sterna albifrons) initially. They were undisturbed and began to preen while two of us crossed the 100 feet wide creek immediately after they had settled. Preening was vigorous over the flight feathers and tail, breast was also preened to a lesser extent. One threequarter grown rectrice with the sheath still attached was seen in the sub-adult. After about

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RESEARCH SCHOLAR, BNHS, POINT CALIMERE SANCTUARY, KODIKKARAI 614 807, THANJAVUR DIST., TAMIL NADU, November 30, 1984. 15 minutes it became apparent that they were completely exhausted, and made no attempt to move, even when sat down beside and photographed from a distance of a few inches.

We thank Dr. A. W. Diamond for his help in identifying the Whitecapped Noddy.

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14. PARAKEET, *PSITTACULA KRAMERI* (SCOPOLI), DAMAGE TO CITRUS FRUITS IN PUNJAB, PAKISTAN

(With two text-figures)

INTRODUCTION

The rose-ringed parakeet, Psittacula krameri (Scopoli), has very wide distribution over almost the whole of India, Pakistan, Bangladesh, Nepal, Central Burma and Sri Lanka (Ali 1977). In recent years it has become extraordinarily abundant in the canal irrigated and rainfed areas of Pakistan and does serious damage to agricultural crops such as cereals (maize), oil seeds (rape seed and sunflower) and fruits (guava, mangoes and citrus). This parakeet inhabits cities, gardens as well as woodlands, scrubland and cultivated areas. They are indiscriminate in feeding habits and can eat grains, seeds, nuts, cooked and raw vege-

tables, seeding weeds, fruits and berries (Smith 1972 and Oureshi 1980).

In Punjab many varities of citrus fruits are widely cultivated. Ten species have been described from Pakistan (Din and Shahina 1980). Of these Citrus sinensis (Linn.) Osbeck (sweet orange or malta) and a Citrus variety locally called as Kinno are highly susceptible to bird damage. Parakeet is the major bird pest damaging these fruits.

Parakeet damage to cereal crops and some fruits has been reported by many workers but no information on damage to citrus fruits is available (Ramzan & Toor 1972, De Grazio 1978 and Bashir 1978). Due to the seriousness of the problem a survey was conducted